Missile Defense Agency
Earned Value Management (EVM) Update

Presented to NDIA/PMSC
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MDA/DOV

Agenda

- **MDA (EVM) Overview**
- **MDA Contract Performance Summary Chart Examples**
- **EVM Health Charts**
- **Director Emphasis Areas**
- **MDA/DCMA Collaboration**
- **Major MDA EVM Challenges**

MDA EVM Overview

- **12 Major Programs with EVM Requirements**

- **4 Primary Contractors – Boeing, LM, NG, Raytheon**

- **$31.5B in CBB**

- **$2.4B Projected Variance at Completion (~$2.9B without Single Point Adjustments)**

- **MDA EVM Policy Currently Being Reviewed and Updated**

  - **2 Directives (EVM and IBR)**

  - **2 Handbooks (EVM Contract Requirements and IBR)**

  - **Policy Memos (Contract Requirements, IBR, Single Point Adjustments, Level of Effort)**

- **Overarching MOA With DCMA**

Contract Performance Summary
Chart Examples
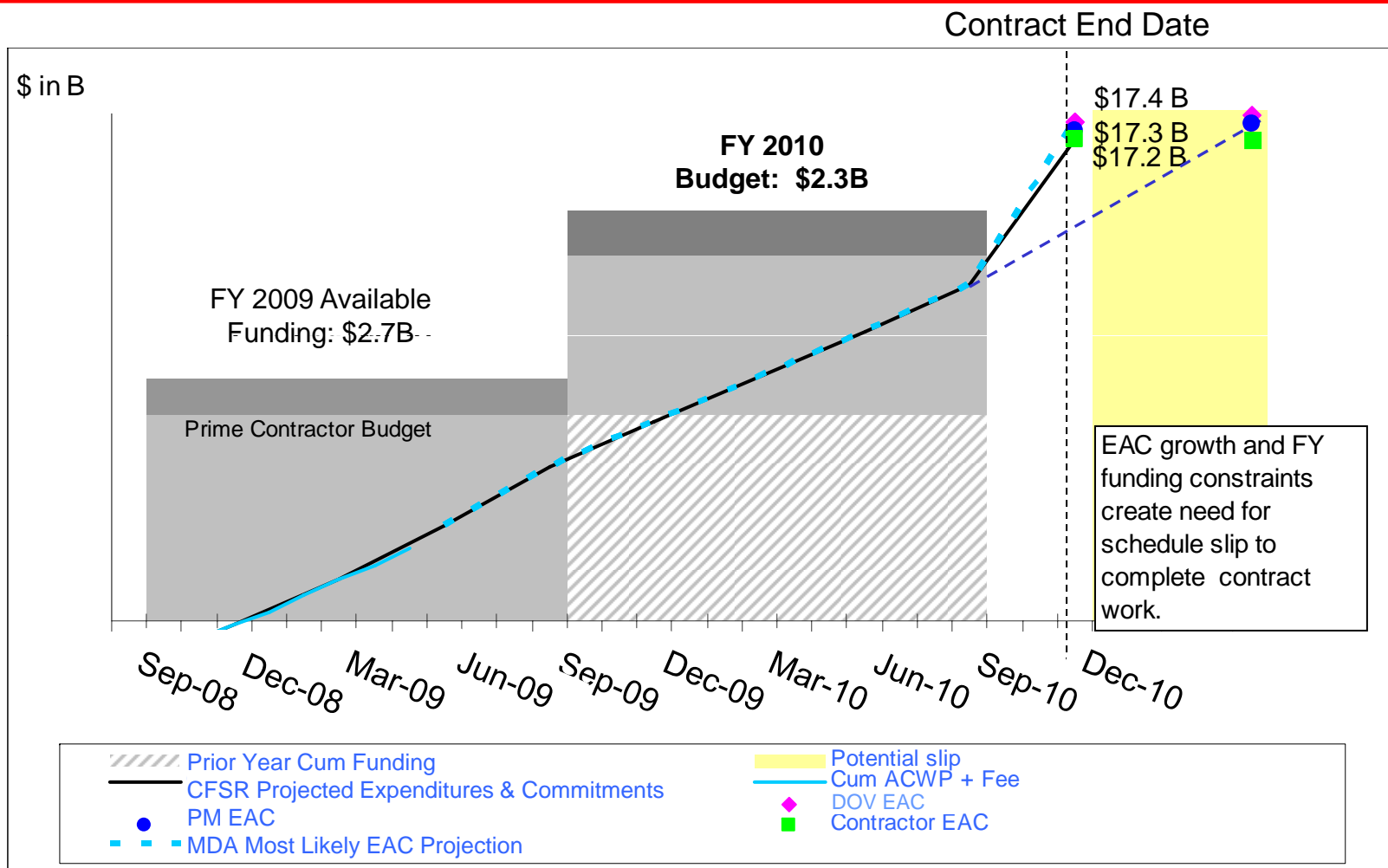
MDA Contract Performance Summary Report
Summary By Program (Example Chart)

Dollars in millions except where noted

Contract Info		Price and Budget		Program Completion			Cost Trends and Estimate				LOE and Funding Status	
Program	Prime Contractor	Target Price	Contract Budget Base	Percent Complete	Target Completion Date	Schedule Health (Good / Avg / Needs Work)	CPI 6 Month	6 Month CPI Trend	Cum. CV	VAC: DO's (Overrun) / Underrun ($ / %)	LOE % (of work remaining & planned)	Budget Impacts (Min., Mod., Sig.)
Program 1	A											
Program 2	B											
Program 3	C											
Program 4	C											
Program 5	B											
Program 6	A											
Program 7	A											
Program 8	D											
Program 9	D											
Program 10	B											
Program 11	B											
TOTAL MDA Programs		$.0B	$.0B						$.0B	$.0B		

MDA Earned Value/Budget Integration Chart tells a similar story

$ in B

Contract End Date

$17.4 B
$17.3 B
$17.2 B

FY 2010
Budget: $2.3B

FY 2009 Available
Funding: $2.7B

Prime Contractor Budget

EAC growth and FY funding constraints create need for schedule slip to complete contract work.

Sep-08 Dec-08 Mar-09 Jun-09 Sep-09 Dec-09 Mar-10 Jun-10 Sep-10 Dec-10

Legend:
- Prior Year Cum Funding
- CFSR Projected Expenditures & Commitments
- PM EAC
- MDA Most Likely EAC Projection
- Potential slip
- Cum ACWP + Fee
- DOV EAC
- Contractor EAC

EVM Health

MDA EVM Health Factors
(Notional Data)

Program	EVM Contract Requirements	Baseline Development/IBR/ Baseline Maintenance	Analysis / Integration	EV Management Systems	DCMA	Training
1	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
2	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
3	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
4	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
5	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
6	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
7	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
8	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
9	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
10	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
11	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN

	Schedule Health	Precedence Logic % Goal - 5% or less	Leads % Goal - 0%	Lags % Goal - 5% or less	FS % Goal > 90%	FF+SS % Goal - 10% or less	SF % Goal - 0%	Hard Constraints Goal - 5% or less	Total Float > 44 % Goal - 5% or less	Negative Float % Goal - 0%
		1	2	3		4		5	6	7
Program One	Good									
Program Two	Good									
Program Three	Good									
Program Four	Good									
Program Five	Good									
Program Six	Good									
Program Seven	Good									

MDA Program Schedule Health (2 of 2) (Notional Data)

	Duration > 44d % Goal - 5% or less	Invalid Forecast Dates % Goal - 0%	Invalid Actual Dates % Goal - 0%	Resources % Goal - 0%	Missed Tasks % Goal - 5% or less	Critical Path Test (pass/fail)	TRIPWIRES		Notes
							Critical Path Length Index (CPLI) Goal 0.95 or greater	Baseline Execution Index (BEI) Goal 0.95 or greater	
	8	9		10	11	12	13	14	
Program One	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Two	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Three	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Four	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Five	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Six	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	
Program Seven	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	

Director Emphasis Areas

Director Emphasis on EVM

- **IBR Memorandum (March 2, 2009)**

  - Use of IBRs as an on-going process and at least annually.

  - Improve schedule "deep dives" and schedule risk assessments.

  - Review 100% of baseline. (Include level-of-effort)

  - Apply MDA IBR Best Practices

  - Make use of the MDA/DOV IBR Support Team (EV analysts and schedulers) to facilitate consistent IBR planning and execution.

- **PMs Trained on IBRs as an Annual Process**

- **PMs Required to Establish Plan for Annual Review of Baselines (In Progress)**

MDA Integrated Baseline Reviews
Recent & Future IBRs

Program	Contractor	Recent IBR Information			Future IBR Information		
		Date	Dollar Amount	Scope	Planned Date	Dollar Amount	Scope
1	A						
2	B						
3	C						
4	B						

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MDA/DCMA Collaboration

DCMA/MDA Collaboration

- **Overarching MOA with DCMA**

  - **Validate LOE Work**

  - **Develop Independent EAC**

  - **Reconcile CPR & CFSR**

  - **Support Rigorous IBR Planning Process**

- **Increase MDA Support of EVM Surveillance**

  - **Schedule Integration**

  - **Managerial Analysis**

  - **Change Incorporation**

- **Program Integrator Reports**

  - **14 Point Schedule Analysis**

  - **EVM Tripwires**

Major MDA EVM Challenges

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- **Implementing Annual IBRs As An Ongoing Process**

- **Need to Coordinate Issues and Best Practices Through DoD Forum**

- **Increasing MDA Support to DCMA Surveillance and Increasing DCMA Support to MDA EVM Process**

- **Improve EVM/Schedule Analysis Integration**